PIPE FEEDING MECHANISM OF AN AUTOMATIC PIPE BENDER

ABSTRACT

A pipe feeding mechanism includes a rack, a power source, first and second planetary gears, a clutch for releaseably securing an output shaft to an input shaft in the first planetary gear, and a brake for releaseably blocking rotation of a sun gear of the first planetary gear; the input shaft of the first planetary gear is connected to the power source; the first planetary gear will be stopped from functioning, and the output shaft thereof rotated at a same speed as the input shaft thereof during a return stroke of pipe feeding cycle after the clutch is switched to a clutching position, and the brake device a releasing position; the first planetary gear will be allowed to function together with the second planetary gear to increase torque output during a forward stroke after the clutch is switched to a releasing position, and the brake device a braking position.